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## 1931 Utility Model Application No.15307

Category No. 28

### 8. Buffer System and Damper

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### Multiple Buffer

#### [Brief Description of the Drawing]

The drawing is a cross sectional view showing a buffer according to the present invention.

#### [Summary of the Nature, Mechanism and Effect of the Utility Mode]

In the drawing, (1) and (3) represent buffer cylinders, (2) and (4) represent one-way valves, (5) and (6) represent pistons, (7) and (8) represent piston lots and (9) represents a piston return spring.

Multiple buffers of the present invention, wherein

a plurality of buffer cylinders are stacked in tandem,  
the piston lot (8) of the cylinder (3) located beneath penetrates through the bottom  
of the cylinder (1) located above,  
and its edge is opposed to the piston (5) so that  
when an impact is imposed on the piston lot (7), the pistons (5)(6) in each of the  
cylinders are compressed simultaneously, and the impact is distributed and  
absorbed by each cylinder (5),

is effective if applied when a piston stroke is extremely short while a large buffer effect is

required and a space to mount it is narrow, and by increasing the number of buffer cylinders to be stacked in tandem, a stroke required to buffer the same amount of impact can be reduced.

When a large multiple buffers are installed in oil, they can be used as multiple buffers in oil.

[A scope of the Claim]

As explained in the drawing, a structure of multiple buffers, wherein a plurality of buffer cylinders comprising a piston cylinder equipped with a one-way valve at its bottom and a piston that is fit in said cylinder are stacked in tandem and their pistons are made capable of moving simultaneously.

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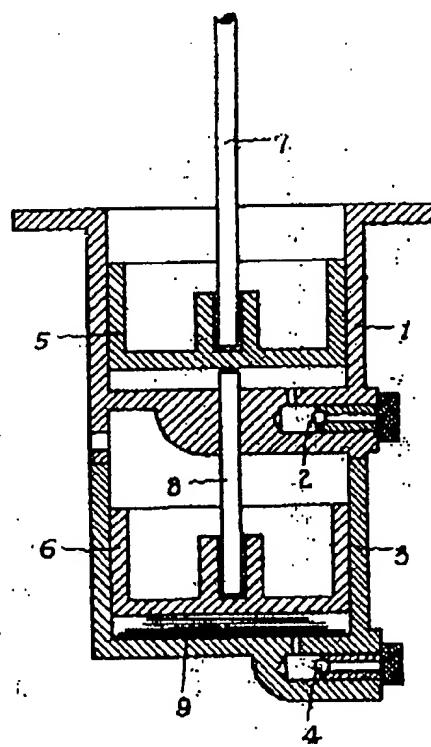
## 多重緩衝器

國面ノ略解 国ハ本案ノ機械器ヲ示ス 補助面附ナリ

實用新系ノ性質、作用及效果ノ要領　國ニ於テ(1)及(2)ハ緩衝器ヲ及(3)ハ逆止弁(反応)ハ、  
案ハ緩衝壺ノ複數個ヲ直列ニ積重ス、下位ニ位置スル壺ノ脚子程(ラシ)テ上位ニ位置セバ、壺ノ底ヲ貫通セシメ其ノ先端ヲ脚子豆ニ  
對向セシメタケン故ニ脚子豆ニ衝擊ヲ加フル時ハ各壺内ソ脚子豆豆ハ同時ニ震動作用ヲ行ヒ衝擊ヲ各壺ニ分布吸收セシム本多重緩衝  
器ハ脚子ノ衝程極メラ短ク而モ大ナル緩衝作用ヲ必要トシ取附場所狭キ場合ニ適用シテ有效ナルモノニシテ直列ニ積重オラレタル緩  
衝壺ノ數ヲ増加スル事ニヨリ同一程度ノ緩衝ヲ行フニ必要トスル衝程ハ減縮セラル

大多重緩衝器ヲ油中ニ設置スルトキハ油入多重緩衝器トシテ使用シ得ヘシ

登録請求ノ範囲 図示説明セル如ク底部ニ一方穿ラ佈フル唧子筒ト該筒内ニ嵌合セル唧子トヨソナル緩衝壺ノ複數個ヲ直列ニ積重ネ夫等ノ唧子ヲ同時ニ運動スヘクナシタル多重緩衝器ノ構造



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